



# WARATAH: DEPLOYMENT OF WARATAH SUPER BATTERIES WITH EKS ENERGY FOR SUSTAINABLE ENERGY STORAGE

## Introduction

This case study examines the partnership between Akaysha and Powin. Together, they have embarked on a joint venture to develop and implement cutting-edge super batteries for large-scale energy storage applications. This collaboration seeks to address the challenges of intermittent renewable energy sources and contribute to a more sustainable and resilient energy grid.

## Background

Akaysha and Powin recognized this demand and joined forces to tackle the intermittency issue that renewable energy presents. Both companies brought their expertise and resources to develop a breakthrough energy storage technology that could help store excess energy during peak generation and release it when needed.

## Objectives

1. Develop Super Battery Technology.
2. Grid Integration
3. Renewable Energy Integration

## Implemented solutions

**1. Technology Development:** Akaysha and Powin pooled their research and development resources to engineer the super batteries. They incorporated innovative materials, advanced control systems, and efficient thermal management to enhance performance and ensure safety.

**2. Pilot Project:** The super batteries were installed to capture excess energy during periods of high generation and release it during peak demand, thereby balancing the grid's energy supply and demand.

**3. Grid Integration:** Powin's expertise in energy storage system integration played a crucial role in connecting the super batteries to the existing energy grid. This involved developing intelligent energy management systems that optimized the batteries' charging and discharging patterns in response to grid conditions.



WARATAH	
<b>Location</b>	WARATAH- Australia
<b>Model of the plant</b>	Battery Storage
<b>Rated Power</b>	840MW
<b>Capacity</b>	1680MW/h
<b>Number of PCS</b>	288
<b>Clients</b>	AKAYSHA
<b>Duration</b>	2022- 2024
<b>Main objectives</b>	Sustainability goals, carbon emissions reduction and renewable energy storage

## Results and Benefits

This project has Enhanced Grid Stability; Increased Renewable Energy Utilization; and Peak shaving.

## Conclusions

The collaboration between Akaysha and Powin in developing and implementing super batteries for energy storage showcased the potential of cutting-edge technologies in supporting renewable energy integration and grid stability. The successful pilot project demonstrated the feasibility and benefits of using super batteries for large-scale energy storage applications.

As a result of this partnership, Akaysha and Powin positioned themselves as leaders in the energy storage market, and their super battery technology garnered interest from utilities, governments, and businesses looking to transition to a more sustainable and resilient energy future.

